

```

1// Command-line arguments
2// are a common way to parameterize execution of programs.
3
4// For example, `go run hello.go` uses `run` and
5// `hello.go` arguments to the `go` program.
6
7package main
8
9import (
10     "fmt"
11     "os"
12)
13
14func main() {
15
16     // `os.Args` provides access to raw command-line
17     // arguments. Note that the first value in this slice
18     // is the path to the program, and `os.Args[1:]`
19     // holds the arguments to the program.
20     fmt.Println("command-line arguments with program: \n", os.Args)
21     fmt.Println("command-line arguments without program: \n", os.Args[1:])
22
23     // You can get individual args with normal indexing.
24     if len(os.Args) > 3 {
25         arg := os.Args[3]
26         fmt.Println(arg)
27     }
28
29     fmt.Print("command-line contains ", len(os.Args)-1, " argument(s) ")
30     fmt.Println("/to say nothing of the path to the program/.")
31     for n, arg := range os.Args {
32         fmt.Printf("%3d. %s\n", n, arg)
33     }
34}
35
36/*
37For such command-line:
38 H:\Work. G0\command_line\command_line.exe a1 a2 a3 "a4 a41" a5
39
40the program displays:
41command-line arguments with program:
42 [H:\Work. G0\command_line\command_line.exe a1 a2 a3 a4 a41 a5]
43command-line arguments without program:
44 [a1 a2 a3 a4 a41 a5]
45a3
46command-line contains 5 argument(s) /to say nothing of the path to the program/.
47 0. H:\Work. G0\command_line\command_line.exe
48 1. a1
49 2. a2
50 3. a3
51 4. a4 a41
52 5. a5
53*/
54
55
56

```

```

57
58package main
59
60import (
61    "fmt"
62    "os"
63)
64
65func main() {
66    stat, err := os.Stat("test.txt")
67    if err != nil {
68        fmt.Println(err)
69        return
70    }
71    fmt.Println(stat.Size())
72
73    f, err := os.OpenFile("test.1", os.O_APPEND, 0666)
74    if err != nil {
75        fmt.Println(err)
76        return
77    }
78
79    b := []byte(" 012345")
80/*    эквивалентно
81    b := []byte {32, 48, 49, 50, 51, 52}
82*/
83    n, err := f.Write(b)
84    fmt.Println(n)
85    if err != nil {
86        fmt.Println(err)
87        return
88    }
89
90    stat, err = os.Stat("test.1")
91    if err != nil {
92        fmt.Println(err)
93        return
94    }
95    fmt.Println(stat.Size())
96
97    err = f.Close()
98    if err != nil {
99        fmt.Println(err)
100        return
101    }
102    fmt.Println("file appended successfully")
103}
104
105

```

II_10d_append.go

```

106
107package main
108import (
109    "fmt"
110    "os"
111)
112
113func main() {
114    file, err := os.Open("morning.txt")
115    if err != nil {
116        fmt.Println(err)
117        return
118    }
119    defer file.Close()
120
121    fileinfo, err := file.Stat()
122    if err != nil {
123        fmt.Println(err)
124        return
125    }
126
127    filesize := fileinfo.Size()
128    buffer := make([]byte, filesize)
129    bytesread, err := file.Read(buffer)
130    if err != nil {
131        fmt.Println(err)
132        return
133    }
134
135    fmt.Println("bytes read: ", bytesread)
136    fmt.Println("bytestream to string: ")
137    fmt.Println(string(buffer))
138}

```

II_10a_read1.go

```

140package main
141import (
142    "fmt"
143    "os"
144)
145
146func main() {
147    f, err := os.Create("test.txt")
148    if err != nil {
149        fmt.Println(err)
150        return
151    }
152    d2 := []byte{104, 101, 108, 108, 111, 32, 119, 111, 114, 108, 100}
153// d2 := []byte("hello world") - то же самое
154    n2, err := f.Write(d2)
155    if err != nil {
156        fmt.Println(err)
157        f.Close()
158        return
159    }
160    fmt.Println(n2, "bytes written successfully")
161    err = f.Close()
162    if err != nil {
163        fmt.Println(err)
164        return
165    }

```

```

166}
167package main
168
169import (
170    "fmt"
171    "io"
172    "os"
173)
174
175func main() {
176    const BufferSize = 500
177    file, err := os.Open("morning.txt")
178    if err != nil {
179        fmt.Println(err)
180        return
181    }
182    defer file.Close()
183
184    buffer := make([]byte, BufferSize)
185
186    for {
187        bytesread, err := file.Read(buffer)
188
189        // err value can be io.EOF, which means that we reached the end of
190        // file, and we have to terminate the loop. Note the fmt.Println lines
191        // will get executed for the last chunk because the io.EOF gets
192        // returned from the Read function only on the *next* iteration, and
193        // the bytes returned will be 0 on that read.
194        if err != nil {
195            if err != io.EOF {
196                fmt.Println(err)
197            }
198
199            break
200        }
201
202        fmt.Println("==> bytes read: ", bytesread)
203        fmt.Println("==> bytestream to string: ")
204        fmt.Println(string(buffer[:bytesread]))
205    }
206}
207
208

```